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| 10/600,774      | 06/20/2003  | Bryan Keith Feller   | 9281                | 5936             |

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| EXAMINER |
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HAND, MELANIE JO

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3761

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06/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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**Office Action Summary**

Application No.

10/600,774

Applicant(s)

FELLER ET AL.

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-6,10,11,15,16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,10,11,15,16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims 1, 4-6, 10, 11, 15 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Briefly, with respect to applicant's argument that Takahashi does not teach a facing layer comprising a topsheet and a secondary topsheet, applicant is referred to Col. 46, lines 15-20, where it is more clearly stated that the film structure of the instant invention is a multi-layer film structure, thus Takahashi does in fact teach a topsheet and a secondary topsheet. Therefore, amended claim 1 is unpatentable over Weisman in view of Takahashi.

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman et al (U.S. Patent No. 4,865,596) in view of Takahashi (U.S. Patent No. 6,329,465).

With respect to **claim 1**: Weisman teaches an absorbent article having a. a facing layer 61 having a first elastic modulus and comprised of cotton or paper (taught by reference to U.S. Patent No. 4,619,649 to Roberts) thereby making the lining liquid-permeable; b. an absorbent core 65 is attached to facing layer 61 at substantially the entirety of the interfacial area adjacent facing layer 61, and has a second elastic modulus. With respect to item c., Weisman teaches that the elastic modulus of the fibers that core 65 is comprised of (second modulus) is  $0.1 \times 10^{10}$  dynes/cm<sup>2</sup> (14,503 psi). ('596, Col. 6, lines 61-63) With respect to item d., outer layer 60 is

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joined to the lining layer 61 at each layer's periphery, and Weisman teaches by reference to Roberts that the outer layer 60 is comprised of a thin, plastic liquid impermeable material.

With further respect to item a, Weisman does not teach a facing layer that comprises a topsheet and a secondary topsheet. Takahashi teaches a multi-layer liner material comprised of ethylene copolymer layers manufactured from elastic fibers of the composition of the instant invention that are produced by nonwoven processes, thus Takahashi teaches a facing layer material comprising a topsheet and a secondary topsheet. (Col. 46, lines 15-20) Takahashi teaches that this film has excellent transparency, mechanical strength and moldability. (see Abstract) It would be obvious to one of ordinary skill in the art to modify the article of Weisman by substituting the liner material taught by reference to Roberts with the liner material taught by Takahashi to provide a facing layer with increased transparency, strength and moldability.

With further respect to item c., Weisman does not teach a first modulus for the lining layer 61. Takahashi teaches a fluid permeable substrate comprised of an ethylene copolymer suitable for use as a liner layer in an absorbent article having an first elastic modulus of less than 15,000 psi ('465, Col. 54, lines 20-26), such range containing values that are greater than the said second modulus for the absorbent core taught by Weisman. The motivation to combine the teachings of Weisman and Takahashi is stated *supra*.

With respect to **claim 4**: Weisman teaches that the density of core 65 is in the range of 0.006 – 0.1 g/cc. ('596, Col. 17, lines 24-30)

With respect to **claim 5**: Weisman teaches a caliper for the absorbent core (second caliper) in the range of 0.46 – 3.1 cm. Takahashi teaches a laminate ethylene copolymer film having a thickness of 1.5 mm. The combined teaching of Weisman and Takahashi teaches a ratio of

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facing layer caliper to absorbent core caliper of between 4.8:100 (or approximately equal to 1:20) to 32:100, or 1:3. (Col. 28, lines 23-34) The motivation to combine the teachings of Weisman and Takahashi is stated *supra* with respect to claim 1.

With respect to **claim 6**: Weisman teaches a catamenial device as absorbent articles that the absorbent core of the instant invention is usable with. ('596, Abstract)

With respect to **claim 11**: Takahashi teaches a laminate liner material comprised of ethylene copolymer layers manufactured from elastic fibers of the composition of the instant invention that are produced by nonwoven processes, thus Takahashi teaches a facing layer material comprising a topsheet and a secondary topsheet, wherein the secondary topsheet is a nonwoven web. (Col. 46, lines 15-20, Col. 70, lines 59-61, Col. 72, lines 59-61, Col. 73, lines 19-22) The motivation to combine the teachings of Weisman and Takahashi is stated *supra* with respect to claim 1.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Takahashi ('465) as applied to claims 1, 4-6, 9 and 11 above, and further in view of Cinelli et al (U.S. Patent Application Publication No. 2002/0013565).

With respect to **claim 10**: The combined teaching of Weisman and Takahashi does not teach a secondary topsheet. Cinelli teaches an absorbent article comprising a multilaminate elastomeric nonwoven topsheet. ('565, ¶ 0095) Cinelli teaches that this topsheet is apertured so as to be pervious to exudates yet nonabsorbent thereby preventing rewet. ('565, ¶ 0092) A multilaminate structure would have enhanced magnitudes of these characteristics, therefore it would be obvious to one of ordinary skill in the art to modify the facing layer of the combined teaching of

Weisman and Takahashi so as to be a multilaminate apertured film structure as taught by Cinelli so as to prevent rewet.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Takahashi ('465) as applied to claims 1, 4-6, 9 and 11 above, and further in view of Ohashi et al ('498).

With respect to **claim 15**: The combined teaching of Weisman and Takahashi does not teach a pair of deep-embossed channels. Ohashi teaches an absorbent article comprising a pair of deep-embossed grooves 15 defining an effective width (Fig. 2) ('498, ¶ 0013). Ohashi teaches that these grooves collect any exudates traveling toward the side edge, preventing leakage. Therefore it would be obvious to modify the article of the combined teaching of Weisman and Takahashi so as to have an absorbent structure inside an undergarment which contains a pair of transversely opposed grooves to prevent leakage as taught by Ohashi to prevent leakage. ('498, ¶ 0016)

With respect to **claim 16**: Ohashi teaches that the width of the channels is between 2-20 mm, but also teaches that the grooves can be widened, therefore Ohashi teaches widths greater than 20 mm. ('498, ¶¶ 0005, 0015) The motivation to combine the teachings of Weisman and Takahashi and Ohashi is stated *supra* with respect to claim 15.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

June 4, 2007

**TATYANA ZALUKAEVA**  
**SUPERVISORY PRIMARY EXAMINER**

